**K-5 Math Lesson Plan**

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| **Teacher:** | | | **Grade:2** | | | **Date(s)**: **Day 1** |
| **Unit Title:**  **Unit 1: Understand Place Value 100, 10, 1s** | | | | **Corresponding Unit Task:**  **Task 4** | | |
| **Essential Question(s):**  **How do I compose numbers up to 100?**  **How do you know the value of a number?**  **How do patterns help me skip count?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Number cards in values of 5’s and 10’s** | | **Student:**  **Number cards in values of 5’s and 10’s**  **Base 10 blocks** | | | **place value**  **hundreds**  **tens**  **ones skip count**  **counting on** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2.NBT.1**  **Understand that the 3-digits of a 3-digit number represent the amount of hundreds, tens, and ones. (Correlates to NCSCOS Math Objective 1.01a)**  **2.NBT.3**  **Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. (Special Note: Expanded form will be taught in Unit 3.)**  **(Correlates to NCSCOS Math Objective 1.01b)**  **2.NBT.4**  **Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.**  **(Correlates to NCSCOS Math Objective 1.01c)**  **Supporting Standards**  **2.NBT.2**  **Count within a 1,000; skip count by 5’s, 10’s, and 100’s** | | | | | |
| **I Can Statement(s):**  **I can count within a 1000; skip count by 5’s, 10’s and 100’s.** | | | | | |
| **Activating Strategy/Hook:** (**How will students become cognitively engaged and focused?) When I play a video game I score points by 5s, 10s, to get to the PERFECT score of 100! In our game we will be building by adding on 5’s and 10’s. However, you CANNOT win if you have too many, so be careful!** | | | | | |
| **Teacher Directed: The teacher will pick one student as a partner for demonstration. Remaining students will gather around (or work at station until their turn to view demonstration game). Teacher will draw first card from the pile, then build that number using base ten blocks. Student will then do the same on his/her turn. Play returns to teacher who will draw again and now have to build ‘on’ to existing base ten blocks. Demonstrate how to trade for a ten when needed. Students turn. Guide student through trading process. Play continues until one person has EXACTLY 100!** | | | | | |
| **Guided Practice: Students will work with partner to play game. Teacher will circulate and monitor progress. Assist students as needed.** | | | | | |
| **Independent Practice: After games have ended students will pick one remaining card and place that number on an index card. Then draw base ten blocks to show how he/she would ‘build’ that number up to 100.** | | | | | |
| **Closing/Summarizing Strategy: Bring students back together. Allow students to share strategies used to get to 100 while playing the game.** | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| |  | | --- | | **Skip count by numbers other than 2’s, 5’s and 10’s.**  **Skip count from a given number – such as count by 5’s starting at 10** | | | | **Use of manipulatives and base ten blocks. Use of hundreds boards.** | | | **Display vocabulary cards with today’s vocabulary.** |
| **Assessment(s**  **Teacher observation and note taking during Independent Practice** | | | | | | |
| **Teacher Reflection:** (Next steps?)   |  | | --- | |  | | | | | | | |

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**K-5 Math Lesson Plan**

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| **Teacher:** | | | **Grade: 2** | | | **Date(s)**: **Day 2** |
| **Unit Title:**  **Unit 1: Understand Place Value 100, 10, 1s** | | | | **Corresponding Unit Task:**  **Task 4** | | |
| **Essential Question(s):**  **How do I compose numbers up to 100?**  **How do you know the value of a number?**  **How do patterns help me skip count?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Number cards in values of 5’s and 10’s, 100’s** | | **Student:**  **Number cards in values of 5’s and 10’s, 100s.**  **Base 10 blocks** | | | **place value**  **hundreds**  **tens**  **ones skip count**  **counting on** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2.NBT.1**  **Understand that the 3-digits of a 3-digit number represent the amount of hundreds, tens, and ones. (Correlates to NCSCOS Math Objective 1.01a)**  **2.NBT.3**  **Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. (Special Note: Expanded form will be taught in Unit 3.)**  **(Correlates to NCSCOS Math Objective 1.01b)**  **2.NBT.4**  **Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.**  **(Correlates to NCSCOS Math Objective 1.01c)**  **Supporting Standards**  **2.NBT.2**  **Count within a 1,000; skip count by 5’s, 10’s, and 100’s** | | | | | |
| **I Can Statement(s):**  **I can count within a 1000; skip count by 5’s, 10’s and 100’s.** | | | | | |
| **Activating Strategy/Hook:** (**How will students become cognitively engaged and focused?)**  **Yesterday your game allowed you to build to 100, but have you thought about what it would be like to build all the way to 1000?!?!?! Today you will get a chance to find out!** | | | | | |
| **Teacher Directed:**  **Review points of the build to 100 game from yesterday. Show the new cards you are adding into the deck. (The multiples of 100.) Foster discussion of how every time students had 10 ones they needed to trade for a ten, so now what’s going to happen when they get 10 tens? Demonstrate (if needed) playing the game again except this time the goal is to build to 1000.** | | | | | |
| **Guided Practice: Students will work with partner to play game. Teacher will circulate and monitor progress. Assist students as needed.** | | | | | |
| **Independent Practice: After games have ended students will pick one remaining card and place that number on an index card. Then draw base ten blocks to show how he/she would ‘build’ that number up to 1000.** | | | | | |
| **Closing/Summarizing Strategy: Bring students back together. Allow students to share strategies used to get to 100 while playing the game.** | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| |  | | --- | | **Skip count by numbers other than 2’s, 5’s and 10’s.**  **Skip count from a given number – such as count by 5’s starting at 10** | | | | **Use of manipulatives and base ten blocks. Use of hundreds boards.** | | | **Display vocabulary cards with today’s vocabulary.** |
| **Assessment(s**  **Teacher observation and note taking during Independent Practice** | | | | | | |
| **Teacher Reflection:** (Next steps?)   |  | | --- | |  | | | | | | | |

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**K-5 Math Lesson Plan**

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| **Teacher:** | | | **Grade: 2** | | | **Date(s)**: **Day 3** |
| **Unit Title:**  **Unit 1: Understand Place Value 100, 10, 1s** | | | | **Corresponding Unit Task:**  **Task 4** | | |
| **Essential Question(s):**  **How do I compose numbers up to 100/1000?**  **How do you know the value of a number?**  **How do patterns help me skip count?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Chart paper and markers** | | **Student:**  **Math journal**  **Pencils** | | | **place value**  **hundreds**  **tens**  **ones skip count**  **counting on** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2.NBT.1**  **Understand that the 3-digits of a 3-digit number represent the amount of hundreds, tens, and ones. (Correlates to NCSCOS Math Objective 1.01a)**  **2.NBT.3**  **Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. (Special Note: Expanded form will be taught in Unit 3.)**  **(Correlates to NCSCOS Math Objective 1.01b)**  **2.NBT.4**  **Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.**  **(Correlates to NCSCOS Math Objective 1.01c)**  **Supporting Standards**  **2.NBT.2**  **Count within a 1,000; skip count by 5’s, 10’s, and 100’s** | | | | | |
| **I Can Statement(s):**  **I can show how to count within a 1000; skip count by 5’s, 10’s and 100’s.** | | | | | |
| **Activating Strategy/Hook:** (**How will students become cognitively engaged and focused?)**  **Can you use your math journal to draw a model of 1000 in base ten blocks?** | | | | | |
| **Teacher Directed: The teacher will use chart paper and markers to demonstrate how to draw each of the base ten blocks. Then drawing a card (from yesterday’s game set) will draw in base ten blocks the number on the card. Starting at the given number ask students how they would describe getting to 100 (or the next hundred). Draw out the explanation given. Then use words/phrases to explain thinking as well.** | | | | | |
| **Guided Practice: Starting at the given number ask students how they would describe getting to 100 (or the next hundred). Draw out the explanation given. Then use words/phrases to explain thinking as well. Do as many examples as necessary for your students.** | | | | | |
| **Independent Practice:**  **Students will be given a number by the teacher (teacher can differentiate numbers according to student needs). Students will model and explain in their math journal how to count up from the number given to 100 and 1000. Student will receive a second number if time allows.** | | | | | |
| **Closing/Summarizing Strategy: Bring students back together. Pick several to share their journal picture and explanation with the class.** | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| |  | | --- | | **Skip count by numbers other than 2’s, 5’s and 10’s.**  **Skip count from a given number – such as count by 5’s starting at 10** | | | | **Use of manipulatives and base ten blocks. Use of hundreds boards.**  **After drawing picture may need assistance with writing explanation. Dictate to another student or teacher as time allows.** | | | **Display vocabulary cards with today’s vocabulary.**  **After drawing picture may need assistance with writing explanation. Dictate to another student or teacher as time allows.** |
| **Assessment(s)**  **Collect and review journals.** | | | | | | |
| **Teacher Reflection:** (Next steps?)   |  | | --- | |  | | | | | | | |

**K-5 Math Lesson Plan**

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| **Teacher** | | | **Grade: 2** | | | **Date(s)**: Day 4 |
| **Unit Title:**  Unit 1 | | | | **Corresponding Unit Task: 4** | | |
| **Essential Question(s):**  **How do I compose numbers up to 1,000?**  **How do you know the value of number?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:** | | **Student:**  **Base ten blocks and picture of base ten blocks for ones, tens and hundreds.**  White boards, dry erase markers or pencil and paper | | | **Ones, tens, hundreds, digits,**  **Base tens, compare, greater than, less than, skip count, count on, numeral** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2. NBT.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. | | | | | |
| **I Can Statement(s):**  I can compare two 3 digit numbers using the >, = or < symbols. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)Here is a song to helps us compare/order numbers. Teach the students to look at the largest place first. For example, when comparing 753 and 943 the kiddos should look at the 7 and the 9 because the hundreds place is the largest place. To help the kiddos remember this concept we sing the following to the tune of "The Farmer in the Dell"...  "We look at the largest place,  We look at the largest place,  When comparing numbers, We look at the largest place." | | | | | |
| **Teacher Directed: The teacher will inform the students that we will be practicing math in the form of a game called the “Place Value Clap.” How to Play Place Value Clap**   |  |  | | --- | --- | |  | **The teacher will model an example to show the students how the game is played.** | |  | **The teacher will write a three digit number on the board and choose three children to come to the front of the room.** | |  | **The students will decide between themselves who is to clap hundreds, who will clap tens, and who will clap units.** | |  | **Lining up in the correct place, they clap their digit or fold their arms for a zero.  For example, if the number was 205, the student in the hundreds place would clap twice.  The student standing in the tens place would fold his/her arms while the student in the units place would clap five times.** | |  | **The “hundreds” person then has to say the whole number correctly.** | |  | **The teacher will ask the class if they have any questions as to how the game is played.** | |  | **The teacher will then pick three different students and assign them a different number without letting the class see or hear what the number is.** | |  | **Next, the students will decide between themselves who is to clap hundreds, who will clap tens, and who will clap units.** | |  | **After they clap out their number, the class will try to say the number correctly.** | |  | **Both numbers are left on the board so that after both numbers have been clapped then have the class compare the 2 numbers using the >, < OR =.** |   **Teacher will put a 3 digit number on the board. Students will use the place value clap to represent the number. The teacher will then put a second number on the board for students to clap out and record. Students will then make a greater than, less than comparison.** | | | | | |
| **Guided Practice:**  **Students will work with a partner or cooperative group to demonstrate understanding using the same method as demonstrated in teacher directed. Students will record the number on their whiteboard or use pencil and paper.** | | | | | |
| **Independent Practice:**  **Students will be given sets of three digit numbers to appropriately use symbols.** | | | | | |
| **Closing/Summarizing Strategy: Turn to your Partner and tell them what you learned about comparing 3 digit numbers. Remind students that recognizing where a number is more or less will be needed to determine how many items need to be bought to replenish the PTA school supplies.** | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
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| **Assessment(s):**  Anecdotal notes taken by teacher. | | | | | | |
| **Teacher Reflection:** (Next steps?) | | | | | | |

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| **Teacher:** | | | **Grade:**  **2** | | | **Date(s)**: |
| **Unit Title:**  Unit 1 | | | | **Corresponding Unit Task:**  **Task 4 ; (day 5 )** | | |
| **Essential Question(s):**  How do I compose numbers up to 1,000?  How do you know the value of a number?  How do patterns help me skip count? | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  See below for optional recording sheet | | **Student:**  1 deck of cards per 2 students  OR  Numbers tiles OR cardstock number tiles (in two different colors)  OR dice/number cubes  Place value mat (if needed)  Recording sheet | | | Numbers, numeral  Skip-count  Place value  Pattern  Ones, tens, hundreds, compare, greater than, less than, | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  2. NBT. 4 Comparing two three digit numbers based on meaning of the hundreds, tens, ones digits, using >, <. and = symbols to record the results of comparisons**.** | | | | | |
| **I Can Statement(s):**  I can compare two 3 digit numbers using the < , >, and = symbols. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)   |  |  | | --- | --- | | Begin the lesson by singing the following song with the students:  **Place Value Song** (Tune: Are You Sleeping) | | | Verse 1 | Place Value, Place Value      Place Value, Place Value Fun, Fun, Fun      Fun, Fun, Fun 3 digits equals      3 digits equals  hundreds, tens, & ones      hundreds, tens, & ones | | Verse 2: same for the first 4 lines above, the last lines go | | |  | 2 digits equals      2 digits equals Tens and ones      Tens and ones | | Verse 3: same for the first 4 lines, the last lines go | | |  | 1 digit equals      1 digit equals only ones      only ones | | | | | | |
| **Teacher Directed:** Explain to the students that today they will be learning more about place value by interacting during a game called “Out Number Your Neighbor”. Using a deck of cards, flip one card at the time to create a 3 digit number on the place value mat. Model how students would alternate turns creating the number as they draw cards. Once digits have been drawn and number created, then use appropriate symbol to indicate which is “greater”, “less” or “equal” between the partners. Explain “how/what” makes it greater, less, or equal, which value makes it so. | | | | | |
| **Guided Practice:** Working with partners, students take turns drawing cards as modeled, creating three digit numbers and use symbols to compare greater than, less than, and equal numbers. Students should be able to talk using math vocabulary to explain “how/what” makes explanation valid. | | | | | |
| **Independent Practice:** Students will then use cards/tiles/die, etc, to create three digit number sentences using the symbols to show valid value statements independently. Students should be able to explain/share which value makes the statement valid (how they know) | | | | | |
| **Closing/Summarizing Strategy:** Students will share with small groups “how they know” that the value of the number in its place value position makes it greater, smaller, or equal to the other number. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| Students will write the word name, show expanded form, and standard form. | | | Students will use stamps to stamp out the visual of the value or draw the value of the digits. | | | Have students write the word name and see if the greater than, less than, equal value holds true for both the number and the word name ☺ or does it change? |
| **Assessment(s):** Teacher will monitor student recording sheets for number comparisons. Monitor to see if student understands greater than, less than, equal by appropriately using the symbols when comparing two 3 digit numbers. | | | | | | |
| **Teacher Reflection:** (Next steps?)  Were students able to work w/ partners using the tools provided without distraction?  Was there enough time/too much time, allowed for the activities?  Were students able to appropriately use the vocabulary when explaining/sharing their responses? | | | | | | |



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| **Teacher:** | | | **Grade: 2** | | | **Date(s)**: last day of unit 1  Day 6 |
| **Unit Title:**  Unit 1 | | | | **Corresponding Unit Task:**  **Task 4** | | |
| **Essential Question(s):**  **How do I compose numbers up to 1,000?**  **How do you know the value of number?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Unit 1 post assessment for 2nd Grade** | | **Student:**  **Paper, pencil** | | | **Ones, tens, hundreds, digits,**  **Base tens, compare, greater than, less than, skip count, count on, numeral** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **2. NBT.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. | | | | | |
| **I Can Statement(s):**  I can compare two 3 digit numbers using the >, = or < symbols. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  Sing Place Value Song from yesterday’s lesson.   |  |  | | --- | --- | | **Place Value Song** (Tune: Are You Sleeping) | | | Verse 1 | Place Value, Place Value      Place Value, Place Value Fun, Fun, Fun      Fun, Fun, Fun 3 digits equals      3 digits equals  hundreds, tens, & ones      hundreds, tens, & ones | | Verse 2: same for the first 4 lines above, the last lines go | | |  | 2 digits equals      2 digits equals Tens and ones      Tens and ones | | Verse 3: same for the first 4 lines, the last lines go | | |  | 1 digit equals      1 digit equals only ones      only ones | | | | | | |
| **Teacher Directed:**  **Review math station guidelines and allow students to complete tasks and begin station work.** | | | | | |
| **Guided Practice:**  **Teacher will grade assessments and work in small groups with students that need additional help.** | | | | | |
| **Independent Practice:**  **Math Stations with unit games once assessment is completed. Also allow time for students to complete task 4 Inventory Investigation.** | | | | | |
| **Closing/Summarizing Strategy:** | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
|  | | |  | | |  |
| **Assessment(s):**  Administer unit 1 post assessment for second grade. | | | | | | |
| **Teacher Reflection:** (Next steps?  Use post assessments and Task 4 Inventory Investigation to determine next steps for guided math groups and stations. | | | | | | |